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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,875	11/26/2003	Takaaki Endo	00862.023325	6094

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NEW YORK, NY 10112

EXAMINER

LIEW, ALEX KOK SOON

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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06/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/721,875	Applicant(s) ENDO ET AL.	
	Examiner Alex Liew	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The examiner cannot find applicable prior art and / or suggestion disclosing conversions based on the first and second conversion conditions are weighted depending on distances from right and left ends of the first image in combination with all of the limitations of claim 9.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 9, 12 and 13 are rejected over U.S.C 103(a) as unpatentable over Xiong (US pat no 6,754,379) in view of Duiker (US pat no 6,983,082).

With regards to claim 2, Xiong discloses an image processing method for generating a panoramic image by compositing first and second images comprising acquiring the first and second images and a reference image which has overlapping portions with both of

Art Unit: 2624

the first and second images (see figure 1a – where the first and second images are those that overlaps with each other and with reference, example is shown in figure 11a, where the reference image is image N, the first and second are image 1 and image N – 1, respectively) and generating the panoramic image by compositing an image obtained by from acquiring first and second means (see figure 1b – shows the final composite image after combining / stitching plurality of panoramic images – the combining of images are done by blending shown in figure 3).

Xiong suggests while blending the panoramic images together, adjusting the intensity of the images so all the images has uniform pixel intensities (see column 16 lines 19 – 24), but does not disclose calculating conversions of panoramic images to the brightness or hue to the brightness or hue of a reference image. Duiker discloses calculating a first conversion condition required to adjust a brightness level of the first image to a brightness level of the reference image (see figure 2B – 252 produces image from camera 1, then the intensities image from camera 1 is adjusted using a correction rule determined by a reference object image shown in figure 1 – 100 to 112) and calculating a second conversion condition required to adjust a brightness level of the second image to a brightness level of the reference (see figure 2B – 253 produces image from camera 2, then the intensities image from camera 2 is adjusted using a correction rule determined by a reference object image shown in figure 1 – 100 to 112 and column 5 lines 8 – 10). One skill in the art would include steps of correcting image brightness because to prevent brightness discontinuity from one panoramic image to another

Art Unit: 2624

panoramic image, resulting in good quality panoramic final image (see Xiong column 16 lines 19 – 24).

With regards to claim 1, see the rationale and rejection for claim 2.

With regards to claim 3, Xiong and Duiker disclose all the limitations discussed in claim 1, but do not explicitly disclose taking the all panoramic images at the same time.

However, it is well known in the art to image panoramic / stereoscopic images at the same time (MPEP 2144.03). One skill in the art would include a step capturing panoramic images at the same time because to increase flexibility of the imaging system to capture the dynamics of the scene where people are within the images.

With regards to claim 4, Xiong discloses a method according to claim 2, wherein the panoramic image is generated by further compositing a third image (see figure 1a – there are more than two panoramic images).

With regards to claims 5 – 8, see the rationale and rejection for claim 2. In addition, see figure 2 – 210, shown a computer, where a computer includes programs stored in storage medium to perform the algorithms discussed in claim 2.

With regards to claim 9, see the rationale and rejection for claim 2. In addition, see figure 11a of Xiong, where there are more than three images shown, '...' indicating

Art Unit: 2624

more images will exist, and repeating brightness conversion of the images using plurality of object reference images is taught by Duiker, shown in figure 1 and 2. See the motivation for claim 2.

With regards to claims 12 and 13, see the rejection and rationale for claim 9.

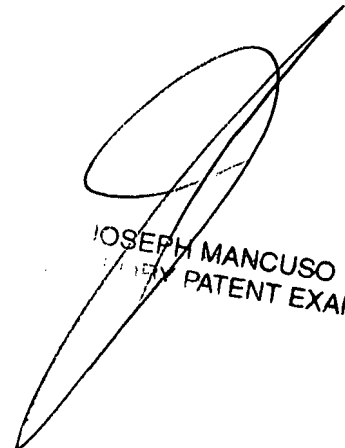
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Liew whose telephone number is (571)272-8623. The examiner can normally be reached on 9:30AM - 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex Liew
AU2624
4/29/07



JOSEPH MANCUSO
PATENT EXAMINER